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RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/501,611A
Source: 1FWP
Date Processed by STIC: 5/12/06

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RAW SEQUENCE LISTING

DATE: 07/14/2006

PATENT APPLICATION: US/10/501,611A

TIME: 14:48:49

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Output Set: N:\CRF4\07142006\J501611A.raw

1 <110> APPLICANT: Pavan, William J.
 2 Loftus, Stacie K.
 3 The Government of the United States of America
 4 as represented by The Secretary of the
 5 Department of Health and Human Services
 6 <120> TITLE OF INVENTION: Alteration of RAB38 Function to Modulate Mammalian
 7 Pigmentation
 8 <130> FILE REFERENCE: 015280-148100US
 C--> 9 <140> **CURRENT APPLICATION NUMBER: US/10/501,611A**
 10 <141> CURRENT FILING DATE: 2004-07-14
 11 <150> PRIOR APPLICATION NUMBER: US 60/349,929
 12 <151> PRIOR FILING DATE: 2002-01-18
 13 <150> PRIOR APPLICATION NUMBER: WO PCT/US03/01622
 14 <151> PRIOR FILING DATE: 2003-01-17
 15 <160> NUMBER OF SEQ ID NOS: 28
 16 <170> SOFTWARE: PatentIn Ver. 2.1
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 8
 20 <212> TYPE: DNA
 21 <213> ORGANISM: Mus musculus
 22 <220> FEATURE:
 23 <223> OTHER INFORMATION: Rab38 sequence of wildtype allele in C57Bl6/J +/+
 24 DNA
 25 <400> SEQUENCE: 1
 26 ctgggtgt 8
 28 <210> SEQ ID NO: 2
 29 <211> LENGTH: 8
 30 <212> TYPE: DNA
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 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Rab38 sequence of chocolate (cht) mutant allele in
 34 c57Bl6/J Rab38cht/+ DNA
 35 <400> SEQUENCE: 2
 36 ctggktgt 8
 38 <210> SEQ ID NO: 3
 39 <211> LENGTH: 34
 40 <212> TYPE: PRT
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 42 <220> FEATURE:
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 45 Met Gln Ala Pro His Lys Glu His Leu Tyr Lys Leu Leu Val Ile Gly
 46 1 5 10 15

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61                20                25                30
62      Asn Phe
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66 <212> TYPE: PRT
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86      Gln Asn Phe Asp Tyr Met Phe Lys Ile Leu Ile Ile Gly Asn Ser Ser
87                20                25                30
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95 <220> FEATURE:
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100      Lys Ile Cys Gln Phe Lys Leu Val Leu Leu Gly Glu Ser Ala Val Gly
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108 <213> ORGANISM: Homo sapiens
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115              20              25
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120 <213> ORGANISM: Homo sapiens
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Rab38 cDNA
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126      agctgctggg gatcggcgac ctgggtgtgg gcaagaccag cattatcaag cgctatgtgc 180
127      accaaaactt ctctcgcac taccgggcca ccattgggtg ggacttcgag ctgaagggtg 240
128      tccactggga cccagagagc gtgggtgcgt tgcagctctg ggacattgct ggtcaagaaa 300
129      gatttggaag catgacaaga gtttattacc gggagctatg gggggcattt attgtttttg 360
130      atgtcaccag accagccaca tttgaagccg tggcaaagtg gaaaaatgat ttggactcaa 420
131      agttaacgct ccctaattgt aagccagtgt cagtggttct gttggccaac aaatgtgacc 480
132      aagggaagga tgtgcttatg aacaatggac tcaagatgga ccagttctgc aaggagcatg 540
133      gcttcgtagg atggtttgaa acatcagcca aggaaaacat aaacattgat gaagcctcaa 600
134      gatgcctggg caagcacata ctgcaaatg agtgtgacct cctagagtct atagaaccgg 660
135      acattgtgaa gcccacatct acatcgccca aggttgtcag ctgctctggc tgtgccaagt 720
136      cctagaaggc tcctctgctg gcatatgaca gacagaacct gtggccctca tgaatcgtgc 780
137      ttcagttttt ctttattacc attttgggta agcgtcagga tagggaagca catgtgacaa 840
138      gccaaagata catgactgta tggttcctgt caaagaggaa cagcaaatgt tctttatgtg 900
139      ttttcccacc ccatacgcac agtgtttaca agcttttaaa atattagtct gtcacaatat 960
140      gctgttttat cattgagcaa agccactcag ggacacagac agccctaata tttgttcctt 1020
141      taaatcaaca aaggcttctg gtcttcttga gaaggggaat aacagagcaa ggcagagggtc 1080
142      aagctaagtg tggggatttg tcttgccctg gtgtgtcttt gttcaggtat caatttggtc 1140
143      ccgggtgggc tgataggtct attaaataga aaccattcat ggtagaccta aggggtgkct 1200
144      gtgatgtttc tcttcagagt cgtgtgcaca ggcagcctgg gcttttggtg tcacttgctg 1260
145      tgccctgaat gctggtttaa ctgaaaactg tatggaaaga tctgctccct gtatgtgcct 1320
146      ttctttcagc ttctctgac tcaagctgca ggactcttct gtatgtggaa gatattatat 1380
147      atatattttt cacaagtgaa aaataaaaca ttaaaaatgc tgtttccctg tttctgata 1439
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 291
151 <212> TYPE: DNA

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152 <213> ORGANISM: Homo sapiens
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Rab38 exon 1 and surrounding intron sequence
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157      aggctccgca agaccgcggg gcctccagga tgcagacacc tcacaaggag cacctgtaca 120
158      agctgctggt gatcggcgac ctgggtgtgg gcaagaccag cattatcaag cgctatgtgc 180
159      accaaaactt ctctcgcac taccgggcca ccattgggtg ggacttcgcg ctgaagggtgc 240
160      tccactggga cccagagacg gtgggtgcgt tgcagctctg ggacattgct g          291
162 <210> SEQ ID NO: 11
163 <211> LENGTH: 281
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Rab38 exon 2
168 <400> SEQUENCE: 11
169      gtcaagaaag atttggaaac atgacaagag tttattaccg ggaagctatg ggggcattta 60
170      ttgtttttga tgtcaccaga ccagccacat ttgaagccgt ggcaaagtgg aaaaatgatt 120
171      tggactcaaa gttaacgctc cctaattggt agccagtgtc agtggttctg ttggccaaca 180
172      aatgtgacca agggaaggat gtgcttatga acaatggact caagatggac cagttctgca 240
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176 <211> LENGTH: 868
177 <212> TYPE: DNA
178 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Rab38 exon 3 and surrounding intron sequence
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183      gtgtgacctc ctagagtcta tagaaccgga cattgtgaag ccccatctca catcgcccaa 120
184      gggtgtcagc tgctctggct gtgccaaatc ctagaaggct cctctgctgg catatgacag 180
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186      gcgtcaggat agggaagcac atgtgacaag ccaaagatac atgactgtat ggttcctgtc 300
187      aaagaggaac agcaaagtgt ctttatgtgt tttccaccc catcagcaca gtgtttacaa 360
188      gcttttaaaa tattagtctg tcacaatatg ctgttttatc attgagcaaa gccactcagg 420
189      gacacagaca gccctaatat ttgttccttt aaatcaacaa aggcttcttg tcttcttgag 480
190      aaggggaata acagagcaag gcagaggtea agctaagtgt ggggatttgt cttgccctgg 540
191      tgtgtctttg ttcaggatc aatttgttcc cgggtggtct gataggctta ttaaatagaa 600
192      accattcatg gtagacctaa gggttgkctg tgatgtttct cttcagagtc gtgtgcacag 660
193      gcagcctggg cttttgttgt cacttgctgt gccctgaatg ctggtttaac tgaaaactgt 720
194      atggaaagat ctgctccctg tatgtgcctt tctttcagct tcctctgact caagctgcag 780
195      gactcttctg tatgtggaag atatattata tatatttttc acaagtgaag aataaaacat 840
196      taaaaatgct gtttcctgt ttctgata          868
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200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
203 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic TYRP15'T3F DNA

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209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic TYRP15'T7R DNA
213 <400> SEQUENCE: 14
214      gcgcgtaata cgactcacta tagggcccag ttgcaaaatt ccagt
216 <210> SEQ ID NO: 15
217 <211> LENGTH: 47
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic MLSN R T7 DNA
222 <400> SEQUENCE: 15
223      gcgggtaata cgactcacta tagggggccac aaacatgtcc tacttac
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 44
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic MLSN FT3 DNA
231 <400> SEQUENCE: 16
232      gcgcgaatta accctcacta aaggggaagct tccggactct ctac
234 <210> SEQ ID NO: 17
235 <211> LENGTH: 21
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR
240      amplification primer Rab38 Ex1F
241 <400> SEQUENCE: 17
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244 <210> SEQ ID NO: 18
245 <211> LENGTH: 21
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
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254 <210> SEQ ID NO: 19
255 <211> LENGTH: 26
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/14/2006
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The rules require that a line not exceed 72 characters in length. This includes spaces.

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Seq#:14; Line(s) 212
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VERIFICATION SUMMARY

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